

THE MINING JOURNAL.

LAW INTELLIGENCE.

THE TALACHE COAL AND IRON COMPANY.

COURT OF BANKRUPTCY, BIRMINGHAM. In this case, the petitioning creditor was a Mr. Howard, an English gentleman, whose son (Mr. Crighton) stated that he had no knowledge whatever of the Talache Company, or what the bills which he held, had been originally passed for, he could prove his client had given consideration for them.—Mr. FITZGERALD, for the bankrupt, said Mr. Shaw had first been made the victim of this bubble company, and then endeavoured to be made a bankrupt of; Leveson appeared to be the conductor and one of the sole getters up of the company, and induced Mr. Shaw to become a shareholder to the amount of £1,000. 10s. 8d., the bill paid for which by (Mr. Crighton) contained were fraudulently obtained; Leveson was a delinquent, without one farthing of property, and Mr. Howard knew, when taking them, that they had been fraudulently obtained; he gave nothing for them, but no assignment of certain houses in Cheltenham.—Mr. Howard then underwent a searching examination, and it appeared that two of the six houses had only been in his possession a fortnight, and three had only been conveyed to him the day before he assigned them to Leveson; he did not know where to find Leveson; had sent notices to every place he thought likely to find him, without success.—His Honour asked if the postponement of the case would injure the property of the bankrupt?—Mr. FITZGERALD replied, that as Mr. Shaw was in Belgium, it would, he expected, be only an adjournment of a few days, and his Honour then postponed the case as far as the appointment of an assessor; he would allow proof of the petitioning creditor's debt, subject, however, to what the bankrupt could show in the shape of objection, on his surrender to the fact.

ACCIDENTS ON RAILWAYS—RESPONSIBILITY OF COMPANIES.

COURT OF QUEEN'S BENCH—SEC. 5. **CARUS V. THE BRIGHTON RAILWAY COMPANY.**—This action was brought to recover compensation for injuries inflicted on the plaintiff, through the negligence of their servants. On the 20th of October, 1841, Mr. Carpenter, the eminent surgeon, was proceeding to Brighton by the railway, occupying a front seat on an open carriage with two servants, his four daughters being inside another carriage; on arriving near the Haywards' health station, the accident occurred by the giving way of the subsoil, and thus throwing the carriages off the rails; the plaintiff was most seriously injured, and confined to his bed six weeks, and, in fact, his constitution was so much broken, that he would feel its effects through life; his two servants were killed, and one of his daughters very much bruised, and the alarm, it was considered, is a great measure, produced her death some months afterwards. A great number of witnesses were examined on both sides, and the Solicitor-General having taken no objection to the wording of the declaration as to some technical points in the Railway Act of Parliament, Lord DENMAN, after reserving his point to enquire a verdict, summed up, and the jury, having retired to consider, returned a verdict for the plaintiff, damages £500.

PROCEEDINGS OF PUBLIC COMPANIES.

REGENT'S CANAL COMPANY.

The half-yearly meeting of the shareholders of this undertaking was held at the board-room of the company's establishment at the City-road Basin, on Wednesday, the 7th inst., at which about sixty proprietors were present.—J. E. DRINKWATER BETHUNE, Esq., having taken the chair, Mr. J. GREEN moved that reporters be admitted to the meeting, which was seconded by Mr. A. WILSON, and carried unanimously, when the reporters (who were then in the office) were invited into the meeting.—The SECRETARY (Mr. E. L. Bissell) read the minutes of the last meeting, and afterwards the two following reports:

REPORT OF THE GENERAL COMMITTEE.

On again meeting the proprietors, the committee are happy to state that the company's affairs are progressing in a satisfactory manner. The tonnage in the past half-year, to 30th November, amounted to 410,945 tons, producing a sum of £10,000, and, from the present appearance of trade upon the canal, and from the River Thames, the committee have every reason to expect that a steady increase of income will be derived. Your committee have to state, that they have completed the purchase of the important property contiguous to the Limehouse Dock, allotted to in their last report. The purchase-money for the premises was £4,000, which, with the contingent expenses, will probably make the outlay on this account amount to about £600. The current resources of the company were sufficient to defray the whole of this expenditure in the first instance, without having recourse to extraneous assistance; it is, however, plain, in accordance with the principles laid down in a former report, that this outlay having been incurred in the acquisition of permanent property, ought not to be charged against the proprietors exclusively in the year in which the purchase happened to be completed, but ought to be charged to the account of the reserved fund. The committee are desirous to take the instructions of the meeting on this point, it having been decided by a resolution of the general meeting of the 23rd June, 1840, that all payments for extraordinary services out of the reserved fund should be specially sanctioned by the proprietors. The committee have to inform the proprietors, that they have succeeded in letting all the arched and pointed arches behind them at the Limehouse dock, and that a satisfactory commencement of business has been made by the three extensive coal-owners and merchants by whom the same are occupied. It has been agreed that certain sheds required for the business of two of the parties should be erected at the expense of the company, the tenants paying during their term an increased rent, at the rate of £ per cent. on the outlay. The cost of the sheds in question will be about £100, and this outlay also, not being a matter of ordinary expenditure on the company's books, should be charged to the account of the reserved fund. The committee have great gratification in reporting, that, notwithstanding the long drought which prevailed during the summer months, the company have possessed an ample supply of water throughout the whole of the past season. The new reservoir, or water works, of the Canal reservoir, was commenced in August, and is now nearly completed, of a cost of about £1,000. This important work was deemed necessary, as an additional security for the company against the recurrence of any pecuniary loss, which was caused by the extraordinary flood consequent on the breaking of the iron in January, 1840. It has been constructed under the directions of the company's experienced works, assisted with the advice of their consulting engineer, and will provide effectively for the security of the reservoir. In conclusion, the committee beg leave to state their decided opinion, that, on a review of the general prospects of the concern, and the efficient state to which their works are now brought, the proprietors may look forward with undivided confidence to continued and increasing prosperity.

ADMIRALTY BOARD.

Your auditors having examined the documents, together with the vouchers for the receipt and expenditure to 30th September last, report that they find the same to be correct, and that the cash balance is about £2,000, exceeding Exchequer Bank. The system of the company's accounts, adopted by us in their last report, being still under revision, your audit committee are not prepared to state the exact balance due to the company, nor the others upon it, and, consequently, cannot give the exacted balance. It is, however, gratifying to your audit committee to report, that your cash balance being about £2,000, will, assuming that the sums due for dividends and rents correspond in amount with those shown in former printed statements, etc., about £2,000—and the liabilities, upon the same principle, at about £1,000, leave a balance of about £1,000, in favour of the company for the first year. Your reserve fund amounts to about £100, the shares being at this time worth £1 per share, and the sum of £100, having been added to that fund under the resolution of the last general assembly.

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Mr. GIBSON asked if the committee were in a position to render a balance sheet for the half year, ending the 30th of September. The CHAIRMAN said: They are.—Mr. GIBSON: I dare say it will be very satisfactory to the meeting to hear that from the chairman.—The CHAIRMAN observed that the annual half yearly meeting would be the proper time for the accounts to be exhibited.—Mr. GIBSON then moved, "That the accounts of the company to be rendered at each half yearly meeting; and that, before each half yearly meeting, the same be distributed amongst the proprietors, with the notes calling each meeting."—The motion, having been seconded, was passed unanimously.—Mr. A. WILSON said that it was objected to force the proprietors to meet under very disadvantageous circumstances; but, in the present case, every considerable benefit would arise to the company, from taking possession of the Newbold property at Limehouse. He added, therefore, more, "That the amount of the profit, say £100, be taken from the reserve fund." He had no doubt that the company would realize a very good interest for the money laid out in that property, which, he felt assured, would soon be found very beneficial to the company. He would move also, "That same be taken from the same fund, for the erection of sheds at Limehouse Dock."—Mr. PEARCE moved there was a resolution that the reserve fund should not be touched till it came to a certain sum.—The CHAIRMAN: Except in special cases.—Mr. A. WILSON: A portion of the surplus will be set aside for the future augmentation of the reserve fund, and that reserve fund is not to be appropriated except in very special cases.—Mr. H. GREEN thought it was very impudent to take so large a sum from the reserve fund, which was only £100, as it would leave only a paltry sum, or no fund. It would be much better to keep the reserve fund, in reserve for a steady dividend. The motion was, however, passed by a large majority.

Mr. GIBSON then made a suggestion for the time of meeting, which Mr. A. WILSON had often thought should be one month, and it was agreed to. Mr. GREEN, Mr. LEWIS (the auditor to the company), Mr. BELVOY, and others concurred. Mr. GREEN replied to a suggestion of Mr. BELVOY, who observed that the late appointment of a audit had not been made by a quorum of the committee, but by the majority present per se. Mr. A. WILSON said that the committee had previously gone through about 200 names, out of which 50 were selected with such qualifications as were agreed, and after going through them, they were left with the majority present, Mr. FISTER, and one or two others, to form their final committee, and he agreed they were pleased. The committee then adjourned, and he rose to a question from Mr. GREEN, the CHAIRMAN having previously put it to the word, was it agreed, was £1,000, or £2,000. —Mr. A. WILSON then moved a vote of thanks to their late distinguished chairman (Mr. C. COLEMAN), and on great attention to the affairs of the company, and the rapid progress still in the increased sum that equity, which was resolved by Mr. A. WILSON, and passed by acclamation.—A vote of thanks was also passed to the chairman, when the meeting adjourned.

It is only justice to say, that every attention was afforded to the press by the committee and Mr. Saxe, the secretary to the company.

GRAND JUNCTION CANAL COMPANY.

The half-yearly general assembly of the proprietors in this undertaking was held on Tuesday, the 6th inst., at the Crown and Anchor Tavern. Mr. WILLIAM ECKENFORD is the chair. The report of the committee states, that the net tonnage for the half-year ending the 20th of June, 1842, amount to £1,512, being 10,276, less than in the preceding six months, and £412, less than in the corresponding period of the preceding year. This falling off in the revenue was to be attributed to the general depression of trade throughout the country. The committee, however, had to inform the proprietors, that although the revenue had been thus diminished, yet, in consequence of the reduction of expenses which had been made in the working of the canal, amounting to nearly £600, the balance in the hands of the company amounted to £4,382, being £326, greater than the balance of the same period of the preceding year. The committee, therefore, recommended the declaration of a dividend of £1, 10s. for the half-year, amounting to £9,092, leaving a balance of £780, out of which the Income Tax would be paid, and the remainder carried to the account for new works. A sum of £600, had lately been expended for repairs on 100 miles of canal. The report having been received and adopted, the meeting separated.

DUKE OF CORNWALL'S HARBOUR, AND LAUNCESTON AND VICTORIA RAILWAY COMPANY.

A special meeting of this company was held at the London Tavern, Bishopsgate-street, on Thursday, the 8th inst., to receive the award of the arbitrator, Mr. G. S. Wilson, to whom the case between the company and their late secretary, Mr. George Ross, had been referred.—The chair was taken by Mr. RAMSDOTHAM, M.P., but only a few proprietors attended. At the request of the chairman, the SECRETARY read the notice, and the SOLICITOR (Mr. Cole) read the award of the arbitrator, which was of considerable length, and the substance of it was, that a verdict was given against Mr. Ross for £1,21, with £300, for interest, and £61, being half the expenses of the award—making it £207, due to the company, from which £12, 10s., a balance of salary due to Mr. Ross, was to be deducted, so that the balance due to the company, was £190, 7s., or thereabouts.—Mr. PAYNE said, that on the part of his clients, he congratulated the directors of the company, on bringing the case against Mr. Ross to such a satisfactory conclusion, though they had all been great sufferers. The chairman had alluded to the scanty attendance that day, but he would say, for all the clients he had the honour to represent (which consisted of a large proportion of that company) that they were so satisfied with the conduct of the directors and of the explanation that would be given, that they would not trouble themselves to come to hear the report, and he was quite sure if they were present, if not the whole, some of them, would express their grateful thanks for the attention of the chairman and directors, in giving up so much of their valuable time to this very unfortunate and most unprofitable business.

The CHAIRMAN observed, that had it not been for that bad speculation with their late secretary, which had given them so much trouble, and had cost the proprietors a large sum of money, the winding up of the affairs of the company might have taken place several years ago. Looking now at the successful issue of the trial, he hoped the proprietors would come forward to meet the necessary call of the directors, so as to prevent any further litigation. The call of 2/- per share would probably be not all required; it might not exceed half, and perhaps less, but if any surplus remained the proprietors would be made acquainted with it, and it would be returned. Every courtesy and every lenity should be shown towards those who expressed a wish to act honourably, but for those who continued to be refractory members, it would be their duty, placed as the directors were, to compel payment, however unpleasant that duty might be to themselves.—Mr. PAYNE hoped that, as this was the last call, the proprietors would, at least, come forward readily, if not cheerfully.—The CHAIRMAN trusted they would, and that their next meeting would be the last. He begged to express his thanks to the gentlemen of the press for their attendance on the occasion.—Mr. CRAWFORD said he should move a vote of thanks to their worthy chairman, for his urbanity on all occasions, which was seconded by Captain BROWN, R.N., and passed by acclamation.—The CHAIRMAN returned thanks, and said that he should do his best for the interest of the proprietors, and thought, at all times, that the more open their discussions were the better for all concerned.—Mr. RICHARDS said, they now saw what they had got by the cry of "no compromise with Mr. Ross," after three years' litigation against a claim founded in injustice, which was proved further to be the case by the result of that arbitration. Had they paid his claim of £2000, he would, no doubt, have set up another for £10,000, as his interest in the land and the profits the company had made; so much, therefore, had been gained by litigation against this get-up of a company.—After some sharp remarks on the conduct of Mr. Ross, the meeting separated.

UNITED HILLS MINING COMPANY.

A special meeting of the shareholders of this company was held at the office, to Adam's Court, Old Broad-street, on Thursday, the 8th inst., pursuant to advertisement, but, being considered of a private nature, the reporter for this Journal was not admitted.

HIBERNIAN JOINT-STOCK BANKING COMPANY.

The half yearly general meeting of the proprietors in this company was held on Monday, the 5th instant, at their banking establishment, in Castle-street, Dublin, H. McCLELLAND, Esq. (the governor), in the chair. The SECRETARY submitted the directors' report, and the statement of accounts, from which it appeared the assets were £43,984, 14s. 11d., and the liabilities, £17,263, 4s. 10d., leaving a sum of £26,721, 10s. 1d., from which the paid-up capital of 25 per cent., £25,000, shows a clear balance in favour of the company of £6,721, 10s. 1d. The directors congratulated the proprietors on the satisfactory progress of their business. The report slightly alluded to the partial and injurious operation of the Stamp Act, with reference to the taxation on the sale or transfer of the company's stock; and that the directors should, in due time, impress on Parliament their views and feelings on the subject. The report and accounts were then adopted, and a motion, granting the usual remuneration to the directors, passed unanimously. Thanks were voted to the chairman and directors, and the meeting separated.

PROTECTOR LIFE INSURANCE.

The annual meeting of the proprietors of this association was held at their office, Old Jewry, on Thursday, the 8th inst., GEORGE RICHARD ROBINSON, Esq. (the chairman of Lloyd's), in the chair, who, after entering into various details, congratulated the assembled proprietors on the favourable progress made by the society. A report was read and adopted. W. BONAL, and Robert Hugh Jones, Esq., were elected directors for the ensuing year, and Thomas Hodgetts, Esq., was again chosen as an auditor.—After a vote of thanks to the chairman and directors, the meeting separated.

THE BRITISH AMERICAN ASSOCIATION.

On Thursday last, the 8th inst., the promoters of this association had a meeting at the office, No. New Bridge-street, Blackfriars. The room was well filled by gentlemen interested. Sir JAMES MERRITT is the chair. The SECRETARY read the minutes of the last meeting. Mr. ANDREW was read the report of the committee, which, after referring to the fact that a report of the former meeting had been prepared by a reporter employed by the company—of which who was sent round to the various papers, but not inserted—it proceeded to say, that the committee, sensible of the justice of their cause, did not intend to reply to the observations of the press. They had discharged themselves of a public duty, in the statement of facts presented to the last annual.—The disputes received from Sir Allan McNabb of a gratifying nature, showing how the objects of the association are promoted in Canada, and the support it will receive from that colony, and the valuable fruits of land which will be opened for colonization. They had received letters advising the arrival of the emigrants of Prince Edward's Island, who went out in the Lady Wood, and also from Mr. Petre, the Solicitor-General of the colony, announcing the consolidated approbation of the local Government to the measures adopted, and it concluded by recommending the committee to inquire into the truth of the charges.—Sir H. BROWN moved that the report be adopted in its present form, and that the charges against the association should prove without foundation.—Dr. BOLTON seconded the motion. He was astonished, on his return, at the charges against the society; though entertaining no doubt of the result, he should stand silent until the investigation had closed.—The following amended resolution was then adopted:—That a committee be appointed to investigate the charges recently brought against the association, and to report thereon, with a general power to inquire into the constitution and objects of the association, the proceedings adopted to carry it out, and the means proposed to sustain it. The following gentlemen were nominated the committee.—Sir J. MORRISON, Mr. LEWIS, Mr. W. SMITH, Mr. F. WILSON, and Mr. SHARPE, with power to add to their number from persons recommended with the association. They had been voted to the chairman, the meeting separated.

COMMERCIAL GAS-LIGHT AND COKE COMPANY.

On Thursday, the 8th inst., a special general meeting of the proprietors of this company was held at the London Tavern, and was attended by upwards of two-thirds of the proprietors, Mr. BURTON in the chair. After a long discussion, it was agreed that some new shares, of £1 each, be created; the holders to be entitled, after full payment, to interest, to the extent of £1 per cent. per annum, in preference to the old shares, and the holders in other respects to be on the same footing as the proprietors of old shares; the shares due to be offered to the present proprietors; and the amount of £1, 10s. to be paid in five monthly instalments. This resolution having been passed, another special meeting was appointed for the 22nd inst., for confirming such resolution, after which, the meeting separated.

MINING CORRESPONDENCE.

ENGLISH MINES.

HOLMEBUSH MINING COMPANY.

Dec. 5.—Hitchins's shaft is sunk below the ninety fathom level 6 fms. 2 ft. the ground at present is very hard. In the 110 fathom level west the lode is still ten inches wide, and worth 2/- per fathom; the wince, below this level, is suspended, and the men are removed to sink a wing in the 100 fathom level. The 100 fathom level, both east and west of Wall's shaft, is as reported last week; the cross-cut at this level, towards the Flapjack lode, continues in hard ground; the lode in the eastern slopes, in the back of the same, is two feet wide, and worth 2/- per fathom; the lode in the western slopes, in the back of ditto, is twenty inches wide, and worth 2/- per fathom. In the eighty and ninety fathom levels, west of Hitchins's shaft, we are still cross-cutting for the lode; the lode in the eastern slopes, in the back of latter, is eighteen inches wide, and worth 2/- per fathom; the lode in the middle slopes, in the back of ditto, is eighteen inches wide, and worth 2/- per fathom; the lode in the western slopes, in the back of ditto, is twenty inches wide, and worth 2/- per fathom. In the eighty fathom level east the lode is fifteen inches wide, intermediate with ore; the cross-cut to the north lode, at this level, is still in favourable ground; the lode in the slopes, in the back of ditto, is fifteen inches wide, and worth 2/- per fathom. In the sixty-two fathom level we are driving to cut the north part of the lode. The lode in the deep adit, east of Lady Beau shaft, no lode has yet been taken down.

F. PHILLIPS.

TRETOIL MINING COMPANY.

Dec. 5.—The lode in the forty fathom level, east of Williams's shaft, is eighteen inches wide—very good tribute ground. The lode in Henwood's shaft is fifteen inches wide—tribute ground. The lode in the forty fathom level, east of Henwood's, is six inches wide—very good tribute ground. The lode in the thirty fathom level, east of Henwood's shaft, is 15 inches wide, producing stones of ore; we expect there is another part of the lode farther south; we have commenced driving south on the cross-course to intersect it. The tin lode in the back of the adit level, east of Moreton's shaft, is much as last reported. Last Friday we set fifteen pitches, varying from 26. 6d. to 12s. in the 12s.

H. WILLIAMS. J. MORCOM.

TRELEIGH CONSOLS MINING COMPANY.

Dec. 5.—In Christie's eighty fathom level east, the lode is two feet wide, worth 7/- per fathom; at this level west we have not yet cut the lode. The lode in the seventy west is eighteen inches wide, worth 6/- per fathom—this is a very kindly lode. At the sixty west the end is suspended to drive under Gordon's shaft. The fifty west is three feet wide, but not much ore. The lode in the forty west is eighteen inches wide, worth 6/- per fathom. At Good Fortune, the fifty cross-cut is extending to communicate with Wheal Marin. At the forty-four east of Good Fortune we are rising in the back; the lode is one foot wide, worth 6/- per fathom. The rise in the forty-four west is eighteen inches wide, worth 7/- per fathom. W. SYMONS.

WEST WHEAL JEWEL MINING ASSOCIATION.

Dec. 5.—The ground in the eighty-five cross-cut, south of Buckingham's shaft, is a great deal more favourable. The seventy east on the south branch is worth 3/- per fathom. The seventy east on Wheal Jewel lode is worth 12/- per fathom. The fifty-seven east on this lode is worth 20/- per fathom; the wince, sinking under this level, is worth 20/- per fathom; the wince under this level west is worth 5/- per fathom. The wings under the forty-two east, on Wheal Jewel lode, is worth 30/- per fathom. S. LEAN.

BEDFORD UNITED MINING COMPANY.

Dec. 5.—Wheat Margins.—The lode in the forty fathom level is about two feet wide, composed of manganic, fluor spar, and fine stones of copper ore, worth one and a half feet wide, composed of spar, manganic, and spots of copper ore, but not sufficient to pay for saving. The new shaft has been sinking with good progress, and on Friday last we hoisted to old men's workings, and fed the lode for the most part stopped away near to surface, for about forty fathoms east of the shaft, but how far west we cannot exactly ascertain, the workings in this direction being "runn'd" together, from the old timber having given way. There are two lodges, a north and a south lode, which come together west of the shaft, about seven fathoms, and at which

ON THE WICKLOW SULPHUR DISTRICT.

BY HENRY THOMAS, F.G.S., MINERAL SURVEYOR.

The county of Wicklow, in Ireland, celebrated for the variety and beauty of its scenery, and for the extent of its antiquarian remains, is equally interesting to the miner and the geologist, in the number and value of its mineral productions. The present notice will be limited to that portion of the county which may, with propriety, be called the sulphur district, from its capability of affording an ample supply to the demand of the United Kingdom for the iron pyrites from which sulphuric acid is manufactured during a long future period.

The metalliferous range of clay-slate may be said to commence with the mountain of Croghan Kinsella, and to extend from thence, in a north-eastern direction, through the townlands or estates of Moneyteigne, Ballycoog, Knocknamooh, Ballymoneen, Ballymurtagh, and Ballygahan, on the western bank of the Ovea, and through Tigrony, Cronchan, Connoree, Killmacow, and Ballinabarney, on the eastern; a length of about ten miles, and of very limited breadth. The trials in the three first-named townlands have hitherto been limited, and the veins have been found to contain chalcocite, quartz, considerable quantities of magnetic ironstone, and small strings of copper pyrites; but it has not yet been ascertained that any large deposits of pyrites exist beyond Ballymoneen in a south-westerly direction. On the north east productive workings have not been extended beyond Killmacow, although the strongly impregnated water issuing from the eastern flank of Ballinabarney Hill, that limit may not be too far to assign to the sulphur district in that direction. The large vein of pyrites, or sulphur ore, from whence alone the supply has been obtained for the past three years, and which is to be regarded as the source of supply for the future, continues uninterrupted, although of unequal size and productiveness, through each of these mines—viz., from Ballymoneen to Killmacow. It has afforded, at intervals near the surface, very rich deposits of black copper ore, which, in depth, has passed into copper pyrites and iron pyrites. Other parallel veins, principally of quartz, producing occasionally good bunches of copper pyrites, have been successfully worked.

The clay-slate, in which the vein of pyrites, or the "Great Sulphur Course," occurs, is without organic remains, varies in colour from a light grey to deep blue, sometimes intermixed with black shale. In the vicinity of the vein it is generally fissile, and disposed to exfoliate in the softer portions, where it has the appearance of decomposition, which is most prevalent immediately on the walls of the lode. The slate is more or less siliceous throughout, passing at times into a quartz slate, of considerable compactness and hardness. The burrows, or heaps of debris, exhibit disintegrated masses, which, from the quantity of ejected pyrites and shale, contained in them, are mostly covered with an efflorescence of mineral salts—viz., of arsenic, iron, and copper. The stratification to the south of the vein, at varying distances, is strongly characterised by the presence of large masses of quartz rock, forming barren ridges (planted occasionally with fir) and precipitous escarpments, and adding, as in the Bell Rock adjoining Ballygahan, much to the beauty of the scenery in the Vale of Ovea. The bearing of the slaty cleavage is about 20° or 25° south of west, with a dip to the south-east. The bearing and dip of the vein are identical with the containing rock, undulating, as in general, with lodes in other countries, both in direction and dip. The pyrites partakes of the bedded character of the slate, is arranged in laminae dipping in a similar direction, which, in the eastern part of the district (Connoree), varies from 20° to 30° from the perpendicular. The size of the vein is changeable, and its productiveness intermittent. In several parts of its course it contains immense deposits of iron pyrites, provincially called sulphur ore, extending occasionally to a width of seven or eight fathoms, containing alternating beds of differing hardness and quality, with occasional intervening beds of soft clay-slate. The vein, as well as the rock, is intersected by joints transverse to the dip and bearing, which much facilitate the operations of the miner. The pyrites, at the joints, show frequent "silkeneides," with bright, polished, and often striated, surfaces. These large deposits of pyrites are generally accompanied on the north, or hanging wall of the vein, by a "flockon," or soft clay, which, in Connoree, is mostly white, and found frequently to occupy the interstices of the joints. When in this state great care is required in extracting the mineral, and in giving security to the workings. The pyrites is sometimes, but very seldom, found crystallised in the blistered form—it occurs massive, homogeneous, compact, and crystalline in texture, and, on the whole, of great uniformity in its composition and quality. The manufacturer requires from three to four tons as an equivalent for a ton of Sicilian sulphur, which shows a great loss in the process of extraction, as analyses of the pyrites range from 40 to 50 per cent.

In most of the mines enumerated, some of the iron pyrites becomes more or less associated with copper, not, as in most instances in Cornwall and other mining districts, with a distinct separation of each mineral visible in the stone, but as a species perfectly homogeneous and compact as the ordinary pyrites, and distinguishable chiefly by its yellow colour. This constitutes what is known as the "coppery sulphur ore," and produces from 2 to 3 and 3½ per cent. of copper, for which the miner is paid as well as for the sulphur, and is, when in sufficient quantity, tolerably remunerative. It occurs in beds in the great sulphur lode, and has also been economically available as an ore of copper alone. The mines now raising such large masses of pyrites were first opened, and worked to a very considerable extent, for copper, and are still working for produce of both kinds. The prosecution of the various levels having for many years proved the presence of pyrites in large quantities, rendered it capable of being mostly wrought at once without delay, and immediate heavy expense of transport, at the moment of the sudden and unexpected demand created by the well-known proceedings of the King of the Two Sicilies.

It is somewhat problematical, whether the price of pyrites would have been an inducement sufficient to have led to the opening of new mines for that mineral alone, except under the most favourable circumstances, nor does it appear that even with all the advantages of plant, machinery erected for other objects, skilful management, and largely-developed resources, that adequate remuneration is afforded to the miner. Most of the pyrites contains a small per centage of copper, not commercially available, but it is a question of considerable interest, of which experience alone will afford the solution, whether, in the deeper prosecution of the workings in this district, a beneficial change may not be expected in the composition of the vein by an increase in the proportion of copper. The extensive beds of manganite, or iron pyrites, occurring in Cornwall and other mining districts, immediately overlying rich deposits of copper ore, are too strongly characterised to allow of a similarity of reasoning being applied to the Wicklow district, where the pyrites differs in so many respects in its compactness, uniformity of composition, and general freedom from admixture of other minerals. A limited deposit of lead ore, containing about 30 per cent. of that metal, and a small quantity of silver, has been wrought in Killmacow, about ten fathoms from the surface. Being found to pass at a greater depth into pyrites, and being otherwise much impregnated with iron, it is of much commercial value; its general appearance is that of a steel-grey silver-lead ore, giving rise to very deceptive estimates of its value. The yearly produce of pyrites from the mines of Ballymurtagh, Ballygahan, Tigrony, Cronchan, and Connoree, has varied with the demand, from 30,000 to 70,000 tons or upwards, which quantity could, doubtless, be considerably exceeded, were the demand to require it, and the price to become more remunerative.

THE IRON TRADE IN GERMANY.—Although Germany possesses rich and numerous mines of iron, in the mountains of the Harz and in Silesia, their product does not suffice to cover the extent of consumption, and that of the railroads is in progress on so many points of her territory. The imports of the world continued, therefore, still on the increase to Hamburg, and principally from England; from whence, in 1841, no less than 30,000 tons were despatched and received in that port, and which, according to the books of valuation there, represented a value in sterling equal to about £100,000.—*Herald.*

Orpiment Recovery.—Many and great are the improvements recently brought under our notice on various office articles, but very few have presented characters of so decided and satisfactory a character as the Patent Glycerine Inkstand, recently introduced to the public by the ingenious Messrs. Perry. It is constructed in a cylindrical form, and so arranged, that, when turned on its side, towards the writer, it presents a cup, containing a constant supply of ink, and, when reversed, it closes automatically, entirely enclosing both air and dust—imperfections which our readers cannot fail to appreciate. The progress of mechanical improvements is, indeed, great, and we hope the spirited patentees will meet with sufficient reward for the ingenuous contrivance which, we trust, is destined to create their success in as social and pleasurable a resort as they have had for some years past.

MINING IN AMERICA.

(Continued from the last Number of the *Mining Journal*.)

As to the nature of the ore, its origin, by a right line of which some judgment may be formed of its probable continuance, it seems that the crevices or fissures which the workmen describe as occurring in their diggings have served as passage ways through which the ore has been projected from below, either in a melted state or in a state of sublimation, or by more slowly acting electrical causes; and that near the surface on the line of fissures (which is likely to be nearly the line of contact of the two rocks), the ore has found favourable circumstances to spread and deposit itself; and further, that these same circumstances may be expected to be renewed at different depths, and the ore there found in lateral injections between the limestone strata, in veins and in the main fissures themselves. Veins of calc spar are of frequent occurrence in these rocks, and one, in particular, was discovered some years since in the red rock not far from the present copper diggings, of unknown thickness. These also accompany the better developed copper ore veins in the primary rocks on Lake Superior and in other parts of the world; and Dr. Houghton has remarked of them, that they pass into veins of copper ore, and veins of copper ore may be traced through different changes till they become veins of calc spar.

Copper ore, as well as lead ore, is obtained to some extent in this formation in England. The deepest mine in that country is the Ketton Copper Mine, in Staffordshire, the shaft being 472 yards deep in the mountain limestone. One of the other localities to which I have referred, as containing indications of veins of copper ore, is on the other side of Jack's Fork, connected with this same red rock ridge, not two miles from the old diggings. The limestone and the red rock are both well exposed, exposing just at the point of contact; they both manifest the same variety of changes as they approach each other that they do at the old diggings—the same porphyritic appearance of the quartz rock—the same breccia that there filled the rotten veins is here noticed—and small pieces of carbonate of copper have been dug up from a hole only four feet deep. But there seems no probability of here finding a large deposit of surface ore.

The third locality is that known as "Valley's diggings," M. Nereid Valley, of St. Louis, having spent some time in working there, and owning a large share of the mine. It is on the north side of the Current River, not quite a mile from it, and about seven miles north-north-east from the old diggings on Jack's Fork. Here too the ore is found at the junction of the red rock and the limestone, on the edge of a little ravine which had washed out loose pieces of the ore, thus leading to the discovery. All that can be determined of the quality of the ore here is, that there is a seam about four inches thick running horizontally under limestone strata into the hill; what its extent is no one can tell, nor whether it leads to any rich veins. The ore is of a different quality from that at the old diggings, being more of a sulphure, and this mixed with the blue carbonate as well as the green. It much resembles the ore from Mineral Point, Wisconsin. The red rock belongs to a different ridge from that at the old diggings, being further east. In character, however, and in the changes the rock undergoes near the limestone, they are the same. Valley became tired of the country and the business, and quitted both. He did considerable work here, but too injudiciously to determine anything concerning the capabilities of the mine. These repetitions of the ore encourage the prospect of this becoming a copper mining country, and naturally lead the people there to look for other veins of ore, which, to some extent, they have been successful in finding. I have seen one said to have been discovered near the Current, not far from the Arkansas line, and also from Fourche a Dunes, a stream in that same part of the country. Many discoveries are also reported to have been made by individuals, who think it prudent to keep them secret, now that the Government lands are not subject to entry. Their localities and others, no doubt, might be discovered by a party of a few men kept at work exploring. But though this may turn out to be a copper mining country, there are many things now operating greatly to its disadvantage. The lands are not yet in the market; the titles to the mines are founded on old Spanish claims, and on the right of pre-emption. These are in contest between two parties as regards the old diggings, and their dispute is not likely to be soon settled. Then, whichever party is successful, the mines will be valued at an exorbitant rate, as though they were already proved to be rich and permanent. Then, too, their remoteness is a serious objection; they are 140 miles by road from Cape Girardeau on the Mississippi River. The country between is unsettled and poor, and little communication is had across it. All the supplies of weight and bulk must come up the Current River, so that all kinds of store goods are of high price, and not easily obtained.

The hills in the neighbourhood can never pay for cultivation. It is only the narrow strips along the sides of the large streams that are fertile; those, however, may be made to support a considerable population. The climate is exceedingly unfavourable to enterprise, six months of the year, at least, being hot and oppressive, if not unhealthy; if the people become accustomed to it, they also become very indolent in their habits, and a labourer there accomplished in a day about half as much as in other parts of the United States. Still the price of labour for the most common hands, is up to from \$12 to \$22 per month, and found, and a regular minor receives from \$20 to \$200. There are few slaves in this section of the country. In regular mining, it is considered preferable to pay so much for the ore raised than to give wages, no confidence ever being reposed in the faithfulness of agents. And this is another serious objection—the liability to encounter difficulties with the hands, they being generally of unaccustomed habits, and all possessing a most independent spirit, that hardly permits them to work for others at all, and causes them to quit for the slightest cause, particularly when the lands around them shall be subject to entry, and they can for a few dollars purchase a farm of their own. Selling the ore is to them, therefore, the most satisfactory way of proceeding, while the mine itself is left to suffer from bad management and want of thorough explorations. The provisions required by the people are of the cheapest kind—corn and beans, coffee and sugar, being nearly all they need. Corn may be bought at prices varying from 25 to 50 cents, a bushel, and beans at about 8 cents, a pound; the other articles about double their value in a civilized country. Horses are suffered to take care of themselves; they will fatten in the woods after the 15th of April; no abundance of wild hay might be cut if wanted. But few of the settlers keep a supply of hay, fodder, or oats; all, however, are well supplied with corn. Cattle can do very well in the woods, and with little expense could be raised in great numbers; so of hogs. But the wolves and a sickness peculiar to the sheep here, will prevent their being raised to any extent.

It is a good country for water power, fine springs, easy flowing and never freezing, bursting out on the hill-sides, and sometimes affording power enough for my works at their very source. Some of these are described as curious, such as are seldom met with elsewhere. Connected with these springs by similar causes, are the phenomena of sinking creeks, natural tunnels through the hills, and vast caves hardly explored as yet, all due to the tendency of the limestone to be worn and hollowed out by the action of water. The river being supplied by these springs, and running quick, never freezes over; but it is only at intervals, except in the spring months, that it is up so that rafts can run. When they do go, they are carried down very rapidly, but there are no dangerous rapids; boats are sometimes dashed against the cliffs in the sharp turns of the river, which are frequent. Strom boats have come up within eighty miles of the Forks of the Forks and the Current, and it is thought that if there were an object, they might come to the Forks in the spring months and during the winter. There are about 100,000, principally one mile, along the Current and its tributaries, north of the Arkansas line. Rafts of pitch pine are sent down every year to great numbers. The imports bring from \$15 to \$20 per thousand feet, but they are not bought for \$10 at the mills. They are put together to the amount of six in thickness, and to run nine miles below the state line, when the raft are doubled. The cargo that was made, was sent down on large flat boats, which were constructed for the purpose, and could carry from twenty to thirty tons each. About seventy-five tons altogether were made on the Current, and these shipped for New Orleans. The statistical account of the expenses of making land, which I had no means to measure in Missouri, as before mentioned, of obtaining, caused differently from the sectional price of the Wisconsin timber. There is this difference, however, in the price of the "mineral," or lead ore, that when it is sold by the miners in Wisconsin for from \$15 to \$18 per thousand pounds, it brings there in Missouri about \$18 for the same quantity. Land is worth about half a cent, more a pound to St. Louis than it is at G. J.

Bucknall's Apparatus.—It will be seen by our advertisements, that a new series of this work, comprising the Eastern and Western States, was published on the 1st of December; and that subscribers' names, for early copies, may be forwarded by post to the editor in London, to be added to the list, which already contains nearly a thousand names, embracing nearly all the sovereigns of Europe, besides the Royal Family of England, and some of the most distinguished peers and noblemen, as well as merchants and traders, without distinction of party—the work being now generally recognised by all as worthy of the greatest confidence, for its fulness, accuracy, and impartiality, on all subjects connected with America.

GASES ACIDIC.—At the second meeting of the Chemical Society this session, held in the rooms of the Society of Arts, Adelphi, a very interesting paper was read from Dr. Stevenson, of Glasgow, by the assistant secretary, on acids, and on the composition of gaseous acid from various substances. A theoretical opinion of prussic acid, prepared by Dr. Stevenson (whose investigations will, no doubt, appear in the society's transactions), was shown to the members. One fact may be given in the chemical manuscript—namely, that the actions of acids and alkalis upon carbonic acid, beautiful crystals of malic acid have been obtained.

MISCELLANEA.

KERN'S MARBLE CEMENT.—At the Society of Arts, on the 30th ult., a paper was read by Mr. White, "On Kern's Marble Cement." It is described as a combination of sulphate of lime and alum. The gypsum undergoes the same preparation as for plaster of Paris, being deprived of its water of crystallisation by baking. It is then steeped in a saturated solution of alum, and this compound, when calcined and reduced to a powder, is in a fit state for use. The cement has been most extensively applied to a stucco, but the finer qualities (when coloured by the simple process of infusing mineral colours in the water with which the cement powder is finally mixed for working) being susceptible of a high degree of polish, produce beautiful imitations of mosaic, and other inland marbles, onyx, &c. The cement is not adapted to hydraulic purposes, or for exposure to the weather, but has been used as a stucco in the internal decorations of Windsor and Buckingham Palaces. From its extreme hardness, it has been found serviceable when used for imbedding and setting the tiles of translated pavements, &c., and has been adopted for this purpose at the French Protestant Church, the new fire-proof chambers in Shorter's-court, and the Reform Club House. In the course of the discussion which followed, Mr. C. H. Smith and Mr. Lee adverted to the extreme hardness of the cement as its principal recommendation, when applied as stucco and for mouldings.

ASPHALT OF SYRIE.—Some years ago, previous to the introduction of this material in England, much admiration was expressed of the pavement of the Place de la Concorde, at Paris; it has now become very general here, and the place laid down in Whitehall, facing the Horse Guards, four years since, remains unaltered, and apparently none the worse for wear, though only half an inch in thickness; the company have just published a list of testimonials from the most influential quarters, including the Commissioners of Woods and Forests, several heads of departments in the Government, and most of our first-rate engineers, recommending its adoption, from actual experience, under all circumstances where paving materials are used; also, as a cement, in the construction of docks, breakwaters, &c. It is, as our readers are, perhaps, aware, a bituminous limestone, obtained from an inexhaustible source at Pyrmont, in the Jura Mountains; it is free from sand, and, from its consistency, never cracks; we certainly think it one of the best pavings for footways ever yet introduced.

TUNNELS.—During the last twenty years the cutting of tunnels through high grounds has caused much notice from the great obstacles placed in the way of the engineer, and which, on many occasions, have been found extremely difficult to surmount. It may be interesting to our readers, in connection with this subject, to state that there exists in the Abruzzi, in Italy, near the village of Capistrillo, a tunnel, three miles in length, which was executed by the Romans (before the Christian era), and in the forming of which 30,000 slaves were employed during eleven years, it is twenty feet high, and at a depth of 400 feet from the highest surface. This subterranean passage was designed and executed for the purpose of carrying off the superfluous waters of the lake of Celano, and has lately been cleared out, employing 100 men for the past ten years.

WOODMAN RAILWAY BRIDGE.—A bridge has been constructed near Mottram, a few miles from Manchester, which attracts much notice. It is composed entirely of Mammoth timber, and consists of three arches, the span of the centre one being 150 feet, and the two others 135 and 120 feet respectively. Each arch is composed of three ribs of laminated planking, whatever planks being placed on each other to the thickness of five feet. The centre arch is the largest ever built of timber, while that of London bridge is the largest in stone, being 152 feet; and the Great Western Railway bridge, at Maidenhead, is the largest in brick, 139 feet. The height of this bridge gives it a most colossal appearance; from the bed of the river to the parapet it is 140 feet, and a large manufactory on the banks of the stream has the appearance, when viewed in contrast with its gigantic neighbour, of a good sized doll-house; also a bridge of 60 feet span, just below, which in itself is a respectable piece of architecture, now appears really insignificant.

IRON SUSPENSION BRIDGE.—Mr. Dredge, of Bath, has just completed an iron bridge at Frome, in Somersetshire, across the Avon. Its power is estimated at 100 tons, while its weight is under 1000 lbs., and occupied four men only four days in its completion; over the first day, it was so completed as to admit carriages to pass.

NEWPORT AND NANTYGLO RAILWAY.—In consequence of repeated rumours that this projected railway has been set on foot to intimidate the Monmouthshire Canal Company into a reduction of their rates of tonnage, the chairman (Mr. R. J. Bissell, M.P.) has officially disclaimed all such intention. He states—"The road is seriously intended to be made, and though difficult will be interpreted, my experience in worldly affairs has convinced me, that there is no difficulty which an honest intention, aided by courage and perseverance, will not surmount. I shall take an early opportunity of entering on the merits of the plan, submitting myself at present with a humble request, that the public will not believe the road to be given up or suspended, until they have an intimation to that effect under my hand."—[Since writing the above, we find that the plans and specifications necessary to obtain the Act of Parliament, have been deposited with the clerk of the peace at Usk, in compliance with the standing orders of the House of Commons. The line has been marked out by John Hodgkinson, Esq., of Abergavenny. It commences near Newport Dock, goes by Highmead and Caeleynorth, to Pontypool and Abercrafan. It then passes through Llanllithon mountain, by a tunnel 240 yards in length, into the Abergavenny valley, and reaches the Nantyglo Iron Works at a distance from the Newport Dock of 2½ miles, and an elevation of 1042 feet.]

ACCIDENT ON THE BIRMINGHAM RAILWAY.—The train which leaves Aylesbury for London at eleven o'clock A.M. met with a serious accident, on Tuesday last, about three-quarters of a mile from the Northbrook tunnel. The fore car (which is four and a half inches in diameter) suddenly snapped—the engine and tender were thrown over the embankment, which in this place is fifteen feet high on one side—and the leading second-class carriage went over on the other; three of the passengers and the stoker are very seriously, but, it is hoped, not dangerously, injured. On examining the broken rail, it appears that the iron, with a very small exception, was defective, although not apparent externally, and had broken off at close to the wheel as to have the appearance of having been cut with a knife; the accident will be fully reported to the Board of Trade for investigation by General Paley.—[Since writing the above, we learn that one of the sufferers has died from the effects of the injuries he received.]

ACCIDENT ON THE VERSAILLES RAILWAY.—The important trial arising from this fatal accident, and which may be considered a grand inquiry to investigate the cause and consequences of the lamentable event commenced on the 22d ult., and was continued until Saturday last; the indictment was confined to M. Jules Bourgeois (administrator delicti), M. Berard (technical director), M. Henri (chief of the Paris station), M. Grignon (chief engineer), M. Lemoine (chief of the station at Versailles), and M. Millet (inspector of the service), who were arraigned as guilty of homicide by negligence; the indictment, notwithstanding all the circumstances attending the accident, enumerating the number and descriptions of the victims, and from the whole of the evidence taken, which was of a very extraordinary nature, it appears, as before stated by us, that the accident was occasioned by the breaking of the rail of the Murray, a four-wheel engine, which had most imprudently been placed before the boiler, a six-wheel engine, of much greater power. The court adjourned that they would take time to consider their verdict, until Saturday (this day).

NEW RAILWAY TURN-TABLES.—We have been requested to direct the attention of those of our readers who are interested in the working of railways, to a turn-table constructed on an entirely new principle, the invention of Captain Handcock, by whom it has been patented, and which has been introduced on the London and Birmingham, the Great Western, and other lines of railway. This table stands on a pivot, instead of the old plan of rails, by which nearly the whole of the building is dispensed with, and the movements of the machine are not sensibly affected by any increase of weight. The table is supported by stays, connecting the outer rim with the base of the turn-table pivot on which the plain wheels, any inequality in the present being relieved by the use of anti-friction bearings. The cost of the new tables appears to be that of the old ones, and when fixed in their position, they are not liable to get out of repair. The best proof of their utility and economy, is in the fact of their having been already introduced on nearly all the old lines; and we understand that the whole of the tables required for the great depots of the Great Western and Birmingham and Birmingham connection, at Crewe, are being laid down this principle. Some of the turn-tables have been also introduced at the junctions of the London and Birmingham Railway, in Caversham, Birmingham, and here, we believe, great credit will be given to the manager of the great works.—*Midland Counties Herald.*

PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY. Incorporated by Royal Charter.—Notice is hereby given, that the FOURTH HALF-YEAR'S DIVIDEND OF THREE AND A HALF PER CENT., declared at the Annual General Meeting of the proprietors on the 10th November last, for the six months ending 30th of September, will be PAID at the offices of the company, 51, St. Mary-Axe, or, to Irish subscribers, at the offices of Messrs. Richard Williams and Son, 29, Donegall-street, Dublin, on and after Friday, the 16th Decr. between the hours of Eleven and Three each day. By order,

JAMES ALLAN, Secretary.

BOLTON AND PRESTON RAILWAY COMPANY. TENDERS FOR LOANS ON MORTGAGE.—The directors of this company are prepared, under powers of their Acts of Parliament, to RECEIVE TENDERS for the LOAN of MONEY, in sums of not less than £100, and for terms of three, five, seven, or ten years, and to GRANT MORTGAGES of the said undertaking, and o. the rates, tolls, &c. thence arising therefrom, as securities for such loans, bearing interest at the rate of 5 per cent. per annum. INTEREST WARRANTS, for the whole term for which the loan shall be made, will be delivered to the tenders along with the mortgages, and be made payable half-yearly, at the company's bankers in London, or Bolton, as may be preferred. The tenders are to express the sum and the term of years for which the same are proposed to be lent, and to be addressed to the secretary, at the company's office, Bolton.

By order of the board of directors,

PETER SINCLAIR, Secretary.

Bolton, August 20.

BRISTOL AND EXETER RAILWAY.—Notice is hereby given, that, in pursuance of a resolution of the last General Meeting of proprietors, the directors of this company are ready to RECEIVE TENDERS for LOANS of MONEY, in sums of not less than £100, and for terms of not less than three, nor more than seven years, on security of LOAN NOTES under the corporate seal of the company, bearing interest at the rate of 5 per cent. per annum, payable half-yearly. Tenders expressing the sum, the term of years, and the residence of the holder, to be addressed to the secretary. By order of the board of directors,

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30	1 0 0	1 14 7	2 9 2	2 10 9	2 10 10
35	1 13 3	2 0 3	2 17 8	2 0 11	2 3 1
40	2 18 2	3 10 19	4 5 5	3 0 9	2 14 7
45	4 11 1	5 17 4	7 5 0	8 14 3	10 0 7

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meeting, whereas, now the time is gone by, and before I get the information, I must needs stop six months for another meeting, when it is too late to complain. I do think, Sir, if you were to direct the attention of the general class of shareholders in all companies, to the advantages which would attend the publication of the reports before the meetings, you would at once establish the principle, for the directors can have no excuse, more especially if it be the wish of the shareholders at large. I do not think it necessary to refer to those particular companies in which I am engaged, for I have every confidence in the directors, but, after all, "prevention is better than cure."

J. R. W.

Northampton, Dec. 5.

WORKING PLANS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—Some months ago I put a request in your valuable paper, that some of your practical correspondents would favour us with the best method of drawing and keeping up the horizontal or working plan of a mine, also showing the use of such plan, and the great disadvantages attendant on the too common practice of conducting the operations of a mine without it. For the sake of a large majority of your readers, who are interested in mining, but who have had no practical experience, a few words in explanation of the plan and sections of a mine will not be out of place; for, I presume, Mr. Editor, that you have often heard persons complain of the difficulty they have found in comprehending the state of the operations of a mine, from an inspection of the drawings, although accompanied by every possible explanation. The confusion generally arises from these persons not understanding what part of the workings have a true appearance on each section, and what is imperfect; in order to remove this, it may be well to describe the point of view in which each drawing should be taken—viz.:

1. The working plan.
2. The longitudinal section.
3. The transverse section.

1. The working plan is a horizontal representation of the operations, and is what surveyors call a bird's-eye view, or, rather, the examiner must suppose the ground to be transparent, and that he can walk over and look down on every part of the workings. 2. The longitudinal section—here the observer must suppose the ground to be cut away, and that he has a panoramic view of the workings at right angles with the course of the levels. 3. The transverse section—here he must imagine himself placed at one of the extremities of the drivings, with his sight directed over or through their course. This being understood, the observer will soon comprehend that, in the working plan, all the levels will show their exact course and length, whether they have been driven on the course of the lode, or as cross-cuts—the position only of the vertical shafts will appear on this plan, and the base only (or the extent diverged from the vertex) of the underlying or oblique shafts and winzes. The longitudinal section will truly represent the whole depth of the downright shafts, the ground that has been stopped or worked away between the levels and the dip of the courses of ore—these are the only operations that can be truly shown on this section. The transverse section will show the declination and length of the inclined shafts and winzes, and the latitudinal extent of the cross-cuts, or right angle drivings. The great utility of the working plan especially, and my opinion respecting the best method of constructing and keeping it up, I hope to forward next week.

JOHN BUDD.

THE TRESAVEAN MINE—TREVISKEY AND BARRIER SETT.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—It has often been matter of surprise to me, that no one has aided you, as they ought to have done, for their own sakes, in exposing the abuses of mining. Cornishmen are proverbially mysterious, and would sooner tell the secrets of their domestic hearths than those of their "bals." If a Cornishman wants to "bring out a mine" openness and candour seem the principal ingredients of his character, and he draws you into calculations that lead, if you will believe him, to El Dorado itself, but, having succeeded in selling his shares, the Cornish veil of secrecy is thrown over his proceedings, and the only knowledge the out-adventurers can obtain, as to the existence of his mine, comes through the medium of your Journal in the shape of periodical calls upon his pocket; and that this unselfishness mostly injures the Cornish themselves, it may be my province hereafter to show, but my object in now addressing you is to enlist your aid in a cause that needs it.

Adjoining Treavean Mine, to the east, there is a sett called Treviskey and Barrier, originally a part of Treavean, but apportioned, about two years ago, to the Treavean adventurers, according to the interest they held in the latter. Mr. Octavius Smith and party, who were the opponents of Captain Teague's party, in the well-known dispute of Treathelien, were—and, as they consider, very unjustly—kept out of this apportionment. The Barrier is a piece of ground five fathoms in width, between Treavean and Treviskey, belonging to the latter, and several of the deep levels in Treavean are driven home right to the Barrier, and it was the object of all, as it is now the wish of the majority, to work through Treavean shaft, and with the aid of their machinery, so that the riches might be come to at once, to the mutual advantage of both; to this the Treavean adventurers agree, with the exception of Mr. Smith and party, who will not allow it unless they have the same interest in Treviskey which their out-adventurers had. Mr. Smith has stated his claim, the out-adventurers agree to it, and have been many months trying to arrange the question amicably, but in vain, as one party in Cornwall holds out, preferring to have a shaft sunk from the surface in Treviskey, and so exclude Mr. Smith and party. As many persons express surprise at the opposition of this one party (I will not mention names at present), perhaps I can solve the mystery. If Treviskey be not worked through Treavean very shortly, a shaft must be sunk from the surface, or the sett will become forfeit, and this party will drive off an arrangement until the shaft will be the only chance of securing the sett, for the shaft will take from three to five years sinking, at a cost of 50,000/- to 60,000/-, and, as the majority of shareholders are out-adventurers, this opposing firm view with extreme fidelity the prospect of a great part of this sum visiting their own pockets for the supply of materials, which they vainly imagine the Londoners would be given enough to allow. One hour's discussion with men of business would settle the affair, but it has been months in agitation, and is as far off settlement as ever, and I am very positive many parties in London would feel obliged for your advocacy, and giving the spur to the sluggish manner in which the affair is managed. The party in Cornwall say they are not averse to an amicable settlement—Why, then, do they not prove their assertion, by putting their shoulders to the wheel?

TRUTH.

[The letter of our correspondent having been mislaid, we have to apologise to him for the delay in its insertion.]

BOLANOS MINING COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—The financial account in the directors' report, December 31st, 1841, page 11, states that the balances to the debit of the cashier at Bolanos, and others in Mexico, amount to the sum of 345,594 dollars, and the stock of ore, then remaining on hand to be 27,500 arrobas. These ore, of the average net produce in the year 1841, the cost of reducing being deducted, will give 125,000 dollars more—together, 270,000 dollars. This large amount seems to have been lost sight of, till the receipt of Mr. Morel's letter from Bolanos, dated 10th September, in which he says:—"I have sent from this district 5000 arrobas of silver to Guadalajara (to be coined), and, perchance, shall be able to send an equal quantity by the beginning of November,"—on that, in answer to the inquiry, from whence a Bolano could 10,000 marks (or 90,000 dollars) be obtained, the above is a satisfactory reply.

A Fancier.

CAIN BREA MINES—MANAGEMENT.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—I wrote you on the 22d ult., but no notice has been taken of my letter, either by yourself or correspondents. Perhaps, there may be reasons for the silence observed, but, as my letter required a reply, I can only attribute the silence to carelessness—the impossibility of giving one of a satisfactory nature. I said, in my letter, that reports were rife in this neighbourhood, whence it appears, in London, you are perfectly ignorant of any late proceedings; perhaps the adventurers are unconscious of the change in treasurership, and the cause why; also, of the appointment of a committee in Cornwall, and the cause why; and who the committee are. I beg, therefore, for your information, to state, that it is strongly rumoured here, that Mr. Michael Williams, Mr. Frederick Hill,

and another, are appointed as a committee in Cornwall—that another committee is to be in London—that Captain Joseph Lyle is in London, helping the committee there, we suppose, for there are some grounds for believing his assistance will not be required here. Remember, I merely speak from report—the truth will come out, and, when privacy can no longer be maintained, perhaps you will then inform us how well this concern has been managed.

AN INQUIRER.

Redruth, Dec. 7.

DURHAM COUNTY COAL COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—I rejoice to see that "An Original Proprietor" has again put you into motion; it is peculiarly proper, since another half-yearly meeting is fast approaching, and it begins to be whispered that a call is under consideration. I do not mean to take up your columns with a long letter, but to submit to your judgment, and the consideration of my brother shareholders, a similar course of proceeding as that by which we lately achieved the removal of our material incumbrance from our concern—viz., that the shareholders in this district (being the nucleus of the company) should hold a meeting, at which to depose three intelligent men to proceed to the collieries and the board-room, and to make such inquiries as may satisfy them what sort of motions ought to be submitted to the public meeting. This, in my opinion, will do more to enlighten the company than the manufactured reports usually read, and which parties are utterly unable to digest or discuss, especially if your Northumberland proprietor will favour the said deputation with the "brief notes" of which he speaks. We have only to read the accounts of recent railway meetings to satisfy us that popular investigation is the only corrective to mismanagement, and out of which no sort of harm can accrue. Trusting, Mr. Editor, that you will also give us your aid and friendly advice in the matter.

Newark, Dec. 6.

I am, Sir, your's, &c., A SHAREHOLDER.

CORNUBIAN MINING COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—As I am informed the three directors in this company enjoy salaries of 100/- each, and as Mr. Stainsby, who is one of the number, has also 120/- in addition, as secretary, I think it behoves the shareholders to calculate the per centage on the shares of which the company is constituted, so as to see the effect it has on calls and dividends. I think at the present moment, when it requires the practice of economy in every department, that such a sum is far too great for the services rendered. I do not impugn the management, but I do object to the pay if my information is correct.

Baltic Coffee-house, Dec. 9.

[We know nothing of the remuneration made to the directors or secretary. If the accounts of the several companies were published, as well as their reports, we think it would be highly satisfactory, to the shareholders at least.]

GREAT WESTERN RAILWAY.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—In your Journal of the 26th ult., a letter appeared from Mr. Venn, of Bristol, making it appear probable that the next dividend will be at the rate of 8 per cent. per annum, with a balance for the following six months of 7827/- Now, having gone into the thing again and again, I cannot make out that there will be the wherewithal for a 6 per cent. dividend; and, before giving my estimate, I would remark, that 7000/- must be deducted from this six months' receipts, on account of the August meeting in Bristol. To show the fair receipts, that the income-tax must be deducted to give the profits, that a large balance should always remain from the December account for the following one in June, and that 7500/- are due to the Bristol road, I would also inquire whether the last lot of new engines will be charged in the general or revenue account; and if to the general account, I ask, if this account is always to remain open? My estimate is as follows:—

Received for 92 weeks	£10,573		Working expenses	£7 p. ct. only	£120,379
Ditto	48,479		Rents and taxes	.....	24,000
Balance from June	8,600	252,565	Interest (probably more)	.....	20,000
Deduct for the Bristol meeting	7,000		Depreciation	.....	10,000
			Dividend, at 6 per cent. per an.	.....	90,720
			Income tax	.....	2,700
			Total	.....	£147,320
Wanting for 6 per cent. div...	719		Total	.....	£147,320
			Total	.....	£147,320

I have barely sufficient for the 6 per cent. dividend—no balance (instead of 11,000/-, as at this time twelve months) for the next six months—notthing for the Bristol company—and no charge for engines. Hoping you will find room for this in your next Number, I am, your's, &c.,

Dec. 7.

A CONSTANT READER.

THE YANKEE GEOLOGIST.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—In your Journal of the 17th September last a correspondent relates the wonderful performances of an extraordinary piece of mechanism, as witnessed by him at Brooklyn, in the state of New York. Should any of your readers be aware of the existence of such a machine in England, and will inform me, through your columns, where it is to be seen, they will confer a favour on

London, Dec. 3.

A CONSTANT READER.

NEW THEORY OF APPLYING STEAM TO AN ENGINE.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—Mr. Goodlet has expressed a wish that I would "grapple" with the question at issue between us, as to the "specific case of the condenser referred to." I beg to inform Mr. Goodlet that, in the first place, I am not an engineer, and in the next place I cannot sufficiently comprehend his theory to "grapple" with it; indeed I was more struck with his sweeping denunciation against condensation, than with the particular method he adopted to explain his theory, and it was to that I more particularly referred in the observations I made. I will, however, try to explain my own ideas of the benefit derived from condensation and the object of its application, and thus Mr. Goodlet, who, of course, understands his own theory, will be able to determine in what respect our views differ.

The pressure of steam in a boiler, which would indicate by the safety-valve a force of 10 lbs. to the square inch, does, in reality, exert a force equal to about 26 lbs. to the square inch; but this additional power is neutralised by the weight of the atmosphere pressing upon the safety-valve. Before the condensing apparatus was introduced as part of the steam-engine, the same opposition to the full power of the steam was experienced in its application to the working of that machine, as that no more power than 10 lbs. to the square inch could be obtained from it, in consequence of the consideration of the weight of the atmosphere in the progress of its work. In order, however, to make the whole power of the steam available, the process of condensing the steam, so as to form a vacuum in the cylinder, was introduced, and thus the whole power of the steam was exerted on one side of the piston, whilst on the other side, by this means, all resistance was got rid of, and the object was attained; that is, the steam would exert a force in the cylinder equal to the 10 lbs. indicated by the safety valve, and the additional 16 lbs., or nearly so, the weight of the atmosphere; in fact, by this improvement, the engine, without any addition being given in the force of the steam, was increased in power in the proportion of ten to twenty-four.

Now it would appear to any person who looked at what seems to be this plain and simple effect produced by condensation, by which the resistance which was previously experienced was got rid of, that the more perfect the condensation of the steam, the more perfect would be the vacuum, and, consequently, the greater certainly in the removal of all resistance to the working of the piston in the cylinder; but Mr. Goodlet tells us that the condensation may be too perfect! This is a new and somewhat startling proposition to make to the dealers in steam, and I am much inclined to think that they will look at it as being very ingenious. Mr. Goodlet suggests, that, for the purpose of effectively excluding the air from the condenser—"the condensation shall not be carried further than water at 212° of temperature, the steam from which will oppose the entrance of air by evaporation, from the perfect watertightness, in the said condenser." I presume that Mr. Goodlet intends to say, that steam from water at 212° of temperature, is equal in power to the weight of the atmosphere, and, consequently, it will admit the entrance into the condenser through evaporation. This may be perfectly true, but will Mr. Goodlet have the boldness to inform us what necessity there is for passing through which the air might pass? Would it not be much better mode of getting rid of this evil by making the work free from evaporation, and by sealing off parts of the condensing apparatus perfectly tight? Mr. Goodlet admits the necessity of excluding the air from the condenser; but will he have the boldness to explain wherein the difference consists between a pressure by the atmosphere, and a pressure by steam? It appears to me that his mode of condensation would be totally impotent; indeed, it would be getting rid of the atmospheric resistance, to supply its place by a steam pressure; for if such a pressure of steam be retained in the condenser, how is the vacuum to be produced?

Mr. Goodlet devotes a good deal to evaporation, and he then attempts to explain his meaning as to the idea of the condenser being superseded by

the steam from the boiler, by supposing a steam-boiler to be so proportioned as to maintain a rate of thirty strokes per minute; and then, in consequence of the condenser being so overpowered, he jumps to the conclusion, that this can only be remedied by reducing the rate of the engine to twenty-five strokes per minute. Now, I have always understood that there are certain proportions observed between the different parts of the steam-engine, and that the cylinder, air-pump, and condensing apparatus, bear such an approximation to each other in size, as shall enable each to perform the duty required of it—that is, if the cylinder be of a sufficient capacity to work at the rate of thirty strokes per minute; the other parts are quite equal to do all that is necessary to keep up that rate. How, then, can the condenser be overpowered by the steam? or how can it be made to appear that condensation can be carried too far, and a positive loss be thereby produced?

Mr. Goodlet explains his meaning as to the use of his "education throttle valve," by introducing an hydraulic engine; and he supposes "a 3-inch diameter supply of water, at a 150-foot pressure, to be applied to work an engine with a piston of a given diameter." He tells us that "the way to turn this supply to the greatest advantage would be to have an intermediate vessel, that would contain two or three fms. of the cylinder, and to allow the water from it to flow in the cylinder with a large passage, so that the full effect of the 150-foot pressure may be on the piston at every stage of its motion." Will Mr. Goodlet have the goodness to inform your readers how this intermediate vessel is to produce any kind of advantage to the machine? I have always understood, that the power of this kind of engine depends upon the quantity of water which it is to put in motion, and the height of the column through which it is brought to operate upon the piston; and, I believe, that I am perfectly safe in adopting this view of the question. If, then, the supply of water be no more than will pass through a column of three inches diameter, no possible advantage can arise from such an intermediate vessel. The supply in the engine will be no more than a column of three inches diameter will afford; and, whether that be conveyed through a column of that diameter, or one of three feet diameter—whether it be admitted into the cylinder through a 3-inch valve or a 6-inch valve—whether there be an intermediate vessel or no such vessel—the effect will be the same; the piston will only move at such a rate as the supply of water will fill the cylinder, and that most, at all times, and under all circumstances, be limited to the quantity which is admitted into the column at the top of it. This is one of the most simple methods of using water power now known, where the situation is suitable to its introduction; and one of immense power has lately been erected in a mine near Bakewell, in Derbyshire, than which, I understand, nothing can be more perfect in its operation, or more effective in its application, and yet it has not been found necessary to introduce such an intermediate vessel as Mr. Goodlet alludes to, for the purpose of turning the supply to the greatest advantage.

I am not aware that I said anything which would imply that Mr. Goodlet was "the only person who has dared to call in question the advantages of condensation to form a vacuum";—indeed, it would be of presumption, at this period of invention and experiment, of theory and of fancied improvement, to insist that only one individual could be found to condemn the present construction of the steam-engine. I merely took Mr. Goodlet's own condemnation of the present system of condensation, without any reference to what others might think about it; and I am not at all less disposed to think him wrong, although he informed us that a person of the name of John Scott Russell has made a somewhat similar charge against the practice alluded to, particularly as the results have proved the advantage of its adoption. Mr. Goodlet further informs us, that five years ago he "used the freedom to write to the Admiralty, the General Steam Navigation Company, and Mr. David Napier, on the subject;" but this does not appear to me to mend the matter. It would seem strange indeed, that, whilst every effort is being made to improve the modes adopted for producing evaporation, and also economising the use of steam, as well for the improvements of the steam-engine, the parties above-named should decline to adopt his views, if they are calculated to produce such wonderful advantages as he states, would arise from them. People are not at this time very backward in availing themselves of whatever may be likely to promote their interests, and to prove beneficial to them; and yet Mr. Goodlet informs us that, although he communicated his views to those parties five years ago, they have not adopted them. What are we to believe the cause to be of their not attending to his theories? Certainly not because they believe them to be improvements upon condensation. But Mr. Goodlet also tells us that, were low pressure steam applied effectively in the way he suggested, he felt assured that it would be found to be more economical as to fuel, and attended with less sacrifice of human life, than the dangerous and expensive plan of working high pressure steam expansively. He, nevertheless, admits, that great advantages have been experienced in Cornwall by working expansively; but he asks—"may not these advantages be traced to the circumstances of steam of high elasticity supplying a remedy for small steam ports and valves, whilst the cutting of the steam being rendered necessary by the contracted size of the condensing apparatus in use at present?" I

CURRENT PRICES OF STOCKS AND SHARES.

The prices of the funds have experienced but little fluctuation during the week. Cottons left off yesterday at 41d. 8m.; Stock Block remains the same, and no transactions of importance have taken place in other securities. Exchange Bills have been in demand, having been done at 60 per cent. Our quotations give the last price up to period of going to press.

STOCK EXCHANGE, Saturday morning, Twelve o'clock.

Cotton Money, short	
Bills Account, 10d. 8m.	
New 4 per Cent., short	
Reduced 5 per Cent., 10d. 1m.	
Reduced 5 per Cent., 10d. 1m.	
Long Associate, 12d. 8m.	
Bank Stock, 17d. 8m.	
—cheque Bills, 61d. 8m.	
Child, 5 per Cent., 60d.	
English Bonds, 5 per Cent., 10d. 4m.	
English, 5 per Cent., 60d.	
Danish, 5 per Cent., 6d. 1m.	

The premium on gold at Paris is 12 per mille, which, at the English Mint price of 17d. 10d. per ounce for standard gold, gives an exchange of 20 dwt., it follows that gold is 7d. per oz. dearer in London than in Paris.

We advise from Hamburg the price of gold is 4d. per mark, which, at the English Mint price of 17d. 10d. per ounce for standard gold, gives an exchange of 1d. 8m., and the exchange at Hamburg on London of short being 6d. 8m., it follows that gold is 1d. 8m. dearer in London than in Hamburg.

The course of exchange at New York is 15d. per cent., and the par of exchange between England and America, being 10d. 20d. per cent., it follows that the exchange is 5d. 8m. per cent. and England. But the quoted exchange at New York being for bills at 60 days' sight, the interest must be deducted from the above difference.

BANK OF ENGLAND—Quarterly Average of the Weekly Liabilities and Assets; from the 1st of September to the 31st of December, 1842, both inclusive.—Liabilities.

Circulation.....	£19,652,000
Deposits.....	6,957,000
	£26,609,000
Bills.....	9,944,000

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